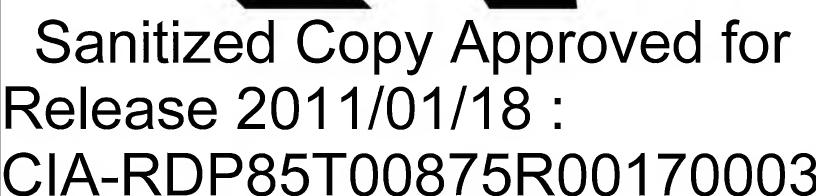
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DIRECTORATE OF INTELLIGENCE

Intelligence Memorandum

The Current Status of Soviet Ocean Shipping and Plans Through 1975

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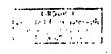
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CENTRAL INTELLIGENCE AGENCY Directorate of Intelligence January 1972

INTELLIGENCE MEMORANDUM

THE CURRENT STATUS OF SOVIET OCEAN SHIPPING AND PLANS THROUGH 1975

Introduction

1. During the last decade the USSR's merchant fleet more than tripled in tonnage, growing somewhat faster than Soviet seaborne foreign trade. In addition to carrying increased volumes of Soviet trade, including heavy logistical support to Cuba, North Vietnam, and Egypt, the expanded fleet has sharply stepped up its carriage of foreign cargo between non-Soviet ports. Despite its impressive growth, the Soviet merchant fleet lacks certain types of ships common to fleets of other leading maritime powers. This memorandum assesses the recent growth, current status, and planned expansion of the Soviet fleet through 1975, focusing on size, composition, and deployment.

Discussion

Fleet Expansion, 1966-70

2. By the end of 1970 the Soviet merchant fleet(1) had grown to 11.9 million deadweight tons (DWT), almost half again its size in 1965. About 4.3 million DWT were delivered to the fleet during the 1966-70 Five-Year Plan, but this tonnage was still 500,000 DWT below the plan goal and 100,000 DWT below that of the previous five years. Deliveries

Note: This memorandum was prepared by the Office of Economic Research.

^{1.} Including only vessels of 1,000 or more gross register tons (GRT) subordinate to the Ministry of the Maritime Fleet; excluding ships of the Caspian Steamship Company and river vessels of the Danube Steamship Company.

peaked in 1964, when net additions exceeded 1.2 million DWT, fell off slightly in 1965 and 1966, and have since averaged about 800,000 DWT annually (see Table 1).

Table 1
Size and Growth
of the Soviet Merchant Fleet

					
	Inventory as of 31 December			crease	Deliveries During Year
Year	Number	Million Dead- weight Tons	Million Dead- weight Tons	Percent	Million Dead- weight Tons
1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970	590 650 680 740 820 900 990 1,070 1,150 1,230 1,320 1,400	3.3 3.9 4.2 4.8 5.7 6.9 8.0 8.9 9.7 10.4 11.2	0.3 0.6 0.3 0.6 0.9 1.2 1.1 0.9 0.8 0.7	6 18 8 14 19 21 16 12 9 8 7	0.4 0.6 0.4 0.7 0.9 1.3 1.2 1.0 0.8 0.8 0.8

a. Based on unrounded data.

- 3. Only about one-third of the new tonnage delivered during 1966-70 was built in Soviet shipyards. The two-thirds acquired abroad came chiefly from Poland (1.1 million DWT), Yugoslavia (790,000 DWT), Finland (500,000 DWT), and East Germany (500,000 DWT).
- 4. The failure to complete planned deliveries was attributed by the Minister of the Maritime Fleet to budget constraints; a shortage of hard currency probably was the principal reason. Negotiations with Japan beginning in 1966 for delivery of more than 300,000 DWT by 1970 fell through because of Soviet insistence on an extended eight-year payment

plan that was unacceptable to the Japanese. (2) Subsequently, the USSR made little effort to purchase tonnage from other hard currency sources.

5. Unlike other maritime nations that were augmenting their fleets with giant tankers and bulk carriers, the USSR made little change in ship sizes. The largest new Soviet tankers were of the 50,000-DWT Sofiya class (see Figure 1). By contrast tankers as large as 370,000 DWT were being

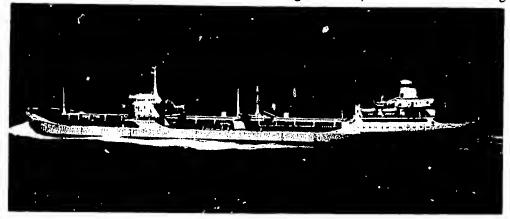


Figure 1. The Soviet 50,000 - DWT Sofiya - Class Tanker Sofiya

added to fleets of other nations. A modest change did occur in the Soviet dry cargo fleet with the addition of seven 23,000-DWT **Zvenigorod**-class bulk carriers (see Figure 2); previously the largest dry cargo ships were

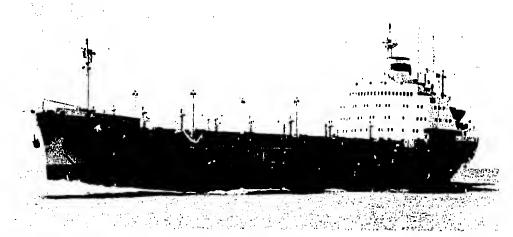


Figure 2. The Soviet 23,000 - DWT Zvenigorod - Class Bulk Dry Cargo Ship Zaporozh've

^{2.} Contemplated purchases of merchant ships from Japan were part of a total package, valued at US \$260 million, that also included fish factory ships, dredges, and other special-purpose craft.

16,000 DWT. The new **Zvenigorod** class was dwarfed, however, by bulk dry cargo ships in other fleets, some as large as 165,000 DWT. Soviet preference for smaller ships is partly explained by the fact that few Soviet ports can handle ships with drafts greater than 32 feet. A fully loaded 370,000-DWT tanker would have a draft of 87 feet.

- 6. The USSR also failed to keep pace in terms of speed. No conventional cargo liners faster than 19 knots were added to the Soviet fleet, whereas liners in the US and Japanese fleets, for example, were operating as fast as 24 knots. Moreover, containerships with speeds of up to 26 knots were being added to Western fleets, but the USSR was neither building nor acquiring such ships.
- 7. During 1966-70 the Soviet merchant fleet did not improve its standing among major maritime nations, some of whose fleets were growing faster than the Soviet fleet. At the end of 1970 it ranked seventh, a position held since 1964, and accounted for almost 4% of world tonnage (see the accompanying tabulation).

		Million DWT as of 31 December 1970	Percent of World Total
1.	Liberia <u>a</u> /	61.0	18.7
2.	Japan —	39.1	12.0
3.	United Kingdom	37.1	11.3
4.	Norway	32.4	9.9
5.	Greece	18.2	5.6
6.	United States (active)	14.4	4.4
7.	USSR	11.9	3.6
	Other	112.9	34.5
	Total	327.0	100.0

a. Most ships flying the Liberian flag are owned by Greek, US, and other foreign interests.

Fleet Performance Through 1970

8. Fleet output in tons-miles increased substantially faster than capacity, rising by 69% from 210 billion ton-nautical miles in 1965 to 354 billion in 1970. At the same time, the volume of cargo carried rose from 119 million to 162 million metric tons, an increase of only 36%.

Performance in 1970 fell short of plan targets by 6% in ton-miles and by 13% in tons carried.

- 9. Although non-fulfillment on both counts reflected the slowdown in deliveries to the fleet, the rerouting of shipping via the Cape of Good Hope after the Suez Canal closed in mid-1967 was the most important reason for the shortfall in tons carried. Round-trip sailing time from the Black Sea to North Vietnam increased from 40 to 72 days, and voyages to other key Soviet trading partners east of Suez were similarly lengthened. These reroutings forced the annual diversion of about 600,000 DWT of additional Soviet shipping to handle trade east of Suez. The impact was heaviest on the dry cargo fleet, which accounts for about two-thirds of all Soviet tonnage using the Cape route.
- 10. Although the ton-mile performance in foreign trade has been greater than in domestic trade since 1956, the volume of cargo carried in domestic trade was greater through 1965 because the voyages in that trade are generally shorter. Since then foreign trade cargoes carried by Soviet ships⁽³⁾ have exceeded domestic cargoes (see the accompanying tabulation).

	1965		1966		1970	
Class of Navigation	Million Tons	Per- cent	Million Tons	Per- cent	Million Tons	Per- cent
Domestic	61.8	52	63.2	48	71.7	44
Foreign trade	57.5	48	68.0	52	90.3	56
Total	119.3	100	131.2	100	162.0	100

11. The USSR has become relatively less dependent on foreign shipping; in 1970 Soviet ships carried 54% of the USSR's seaborne foreign trade, compared with 50% in 1965 (see the accompanying tabulation). This achievement was close to the 1970 plan target of 56%.

^{3.} Foreign trade cargoes carried by Soviet ships include exports and imports moving through Soviet ports and shipments between foreign ports both on Soviet account and for foreign shippers.

	1965	<u>.</u>	1970	
	Million Tons	Per- cent	Million Tons	Per-
On Soviet ships	50	50	76	54
On foreign ships a/	51	50	64	46
${\it Total}$	101	100	140 <u>b</u> /	100

a. Exports account for the largest part by far of Soviet seabarne foreign trade. Because a substantial portion of Soviet exports is sold for bounds of the foreign tonnage is chartered by the purchasers.

b. The Soviet foreign trade handbook reports Soviet seaborne foreign trade in 1970 as 132.5 million tons. This volume has been adjusted upwards in this memorandum to provide for aid cargoes, mail, and other items not included in Ministry of Foreign Trade statistics.

12. The volume of cargoes carried by Soviet ships for overseas clients between foreign ports also increased, from 7.5 million tons in 1965 to about 14 million tons in 1970. Clients in the less developed countries accounted for 40% of these cargoes, and clients in the Communist world and in the Industrial West 30% each. Some of the cargoes and trade routes involved are as follows:

Cargo	Origin	Destination	
Sugar	Cuba	Western Europe	
Coal	Poland, United Kingdom, and Belgium	Western Europe	
Crude oil	Romania and various Near Eastern countries	Western Europe	
Ores, jute, and copra	India and Indonesia	Western Europe	
Cotton	Egypt	Western Europe	
Ores	Morocco, Algeria, and other African countries	Poland and Western Europe	
Cotton and sulfur	Mexico	Western Europe and Latin America	
Grain	Canada .	India and Western Europe	
General cargo	Japan	United States and Canada	

Soviet Cirgo Liner Services

- 13. In 1970, there were 33 Soviet international cargo liner services (see the Appendix), and they handled almost seven million tons of cargo. Eight of these lines carried substantial amounts of non-Soviet cargoes between non-Soviet ports; there were only two such lines in 1965. New services established during 1966-70 included lines linking Western Europe with Australia and New Zealand, Japan with the West Coast of North America, Japan with Southeast Asia and India, and Iranian ports on the Caspian Sea with Western Europe. The number of Soviet international liner services at the end of 1970 would have been even larger had the Suez Canal closure and other factors not caused Moscow to modify or give up some services functioning at the end of 1965. Services eliminated include lines from the Black Sea to Burma and Ceylon and from Danube River ports to the Red Sea.
- 14. On the lines to Australia and New Zealand, and on one established earlier between the Mediterranean and eastern Canada, the Soviet steamship companies are members of the freight conferences and adhere to their rates and rules. However, the Soviet lines out of Japan, including one to the US West Coast, operate outside the conference system. Like other independent lines on these routes, the Soviets charge about 15% less than the conferences.
- 15. In 1969, Soviet ships began trial voyages to US West Coast ports that led to the inclusion of those ports in the USSR's service to western Canada. These were the first calls by Soviet cargo ships at US ports since the beginning of the Korean War. These calls -- 13 in 1970 -- have been confined to the West Coast by the threat of International Longshoremen's Association (ILA) boycotts in East Coast and Gulf ports. The ILA recently agreed to lift this boycott for US grain shipments to the USSR.
- 16. By the end of 1970 a few Soviet international lines were carrying small amounts of cargo in containers. Some were small Soviet railway containers (5 tons and under), while others, leased from foreign shippers, were 20- and 40-foot containers conforming to new international standards and carried on the decks of conventional cargo ships. International routes handling container traffic included Ilichevsk Egypt, Black Sea ports Bulgaria, Baltic ports United Kingdom, Baltic ports East Germany, and Far Eastern ports Japan.
- 17. Seeking increased recognition as a maritime power and better handling of its ships in foreign ports, the USSR, in 1967, began entering into nondiscriminatory bilateral shipping agreements with such trading

partners as France, the Netherlands, the United Kingdom, and Spain.⁽⁴⁾ The USSR also set up joint shipping agencies with local nationals in Japan, Singapore, Hong Kong, and Antwerp to handle the local business affairs of Soviet ships and to solicit cargoes.

Goals for Shipping During 1971-75

- 18. The new 1971-75 Five-Year Plan suggests a further slowing in the growth of the merchant fleet (see Table 2). The plan calls for an increase to 16 million DWT by 1975. At that level the fleet probably would have surpassed the US fleet and become the sixth largest in the world. By that time, however, all other currently larger fleets, except the Greek fleet, are likely to have tonnages at least twice the Soviet level. As a result, the Soviet share of world tonnage probably will remain 4% at best.
- 19. To meet plan goals, deliveries will have to approach 4.5 million DWT, 200,000 DWT more than the level achieved during 1966-70. Although this would require annual deliveries of 900,000 DWT, well below the record 1.3 million DWT delivered in 1964, it is still greater than the yearly average since 1966. In pursuing its goal, the USSR will rely both on local production and foreign purchases.
- 20. The composition of ship deliveries will change significantly in the next five years. After 1973 the fleet probably will acquire some 150,000-DWT Soviet-built Mir-class tankers with 56-foot drafts (see Figure 3). To accommodate these ships, a "deep water port" with depths

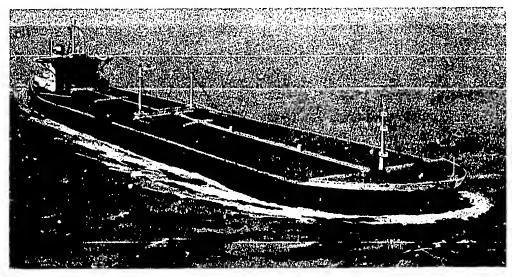


Figure 3. Sketch of the Planned Soviet 150,000 - DY/T Tanker Mir

^{4.} Nondiscriminatory agreements recognize the right of third party ships to carry cargo between the signatory countries.

Table 2
Size and Performance of the Soviet Merchant Fleet

• •				
	1960	1965	1970	19 7 5 Plan
Fleet tonnage				
Million deadweight tons				
Total Absolute increase	3.9	8.0 4.1	11.9 3.9	16.0 4.1
Percentage increase		105.5	49	34
Fleet performance				
Billion ton-nautical mi	les			a. n
Total Absolute increase	71.0	209.9 138.9	353.8 143.9	495.3 141.5
Percentage increase		196	69	40
Million metric tons car:	ried			
Total Absolute increase	75.9	119.3 43.4	162.0 42.7	204.9 42.9
Percentage increase		57	36	26
Average length of haul				
Nautical miles				•
Total Absolute increase	935	1,759 824	2,184 425	2,417 233
Percentage increase		88	24	1,1

up to 59 feet will be built on the Black Sea near Odessa. The Soviets also may introduce a relatively large combined bulk ore and petroleum carrier in the 120,000-DWT class. This vessel could be used for petroleum exports from the Black Sea and for coal exports from Vrangel Bay in the Far East, where a deep water port with a bulk cargo berth for ships of this size is planned.

21. Although deliveries to the dry cargo fleet will continue to emphasize vessels of 23,000 DWT and under with speeds of 19 knots and less as in the preceding Five-Year Plan, a few 50,000-DWT bulk carriers and one class of 23-knot cargo liners also will be added. The latter vessel—the "SO-12S"—is a 15,000-DWT general-purpose dry cargo ship with a steam turbine powerplant (see Figure 4). It is not clear whether this ship also will be configured in a container-carrying variant.

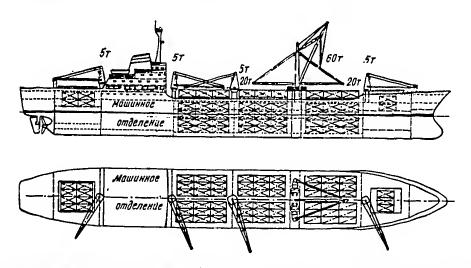


Figure 4. Plans for the Proposed Soviet 23 - Knot, 15,000 - DWT "SO - 12S" - Class Cargo Liner

- 22. At least four classes of dry cargo ships planned for delivery will be full or part containerships. The first of these vessels, two units of the East German-built Boltenhagen class Fritsis Gaylis and Vasiliy Kucher were delivered in June 1971. Slightly under 1,000 DWT, they are full containerships and can carry 40 standard 20-foot containers at 12 knots. The Gaylis is in liner service between Riga and western UK ports; the Kucher is on the joint Soviet-Bulgarian line between llichevsk and Varna on the Black Sea.
- 23. The lead ship of the first class of full containerships to be built in the USSR the Sestroretsk is under construction at the Vyborg Shipyard near Leningrad. Based on the design of a timber carrier built at

the same yard, the vessel is 7,000 DWT and will earry 218 standard 20-foot containers at 16 knots. Although larger containerships with capacities of 300 and 700 standard containers are also planned, no details are available. Western shipowners are currently operating containerships as large as 29,000 DWT with space for as many as 1,000 standard 20-foot containers and speeds up to 26 knots.

- 24. Planned increases in fleet performance during 1971-75 are very close in absolute terms to achievements under the preceding Five-Year Plan (Table 2). Cargo turnover is to grow 40% to 495 billion ton-miles by 1975; cargo volume is to advance 26% to 205 million tons. Shipments in foreign trade are scheduled to increase 37% to 124 million tons, with an even sharper increase in shipments on behalf of non-Soviet clients.
- 25. Soviet plans to seeure a larger volume of world commerce for the merchant fleet were reflected in expansion of overseas liner services in 1971. At least three were opened during the first seven months of the year: a line Letween Soviet Black Sea ports and southern France in April; another between Malaysia, Western Europe, and the Black Sea in May; and a third line linking Soviet Baltic ports, Western Europe, and the west coast of South America in July. The only significant gap in the network of Soviet cargo lines to the developing world is Central America, where the USSR's trading partners in 1970 were Mexico and Costa Rica. Soviet ships already call irregularly at Mexican ports, and it is likely that liner service will be extended to Mexico and perhaps to other countries in this region. Regular service to US East Coast ports may also be initiated, now that prospects have improved for ending the longstanding threat of a boycott by longshoremen.
- 26. Along with the introduction of newly delivered containerships on existing liner routes to Bulgaria and to the United Kingdom in 1971, liner services from the Far East port of Nakhodka to Japan and from Leningrad to London have been improved by the introduction of containerships that are modified conventional dry cargo vessels. Containerships sailing between the Soviet Far East and Japan carry not only goods in Soviet-Japanese trade but also transit cargo in Japan's trade with Western Europe moving over the Trans-Siberian land bridge. Carriage between Leningrad and London involves both transit cargo between Japan and the United Kingdom and commodities in Soviet-British trade. Previously, large containers built to international standards have moved on these routes only on an experimental basis as deek eargo on conventional freighters.

Conclusions

- 27. During 1966-70 the Soviet merchant fleet increased in tonnage almost 50% and by the end of 1970 totaled nearly 12 million DWT. With about 4% of world merchant tonnage, the Soviet fleet ranks seventh, just behind the US fleet. Although more than 65% of Soviet merchant ships are less than ten years old, the fleet lacks the large tankers, bulk carriers, and fast, modern cargo liners and containerships that are common to the fleets of the other maritime powers. Thus the Soviets are transporting many of their own cargoes inefficiently and are unable to compete in many areas in the carriage of cargoes for foreign shippers.
- 28. The USSR intends to expand and modernize its fleet during 1971-75. Planned deliveries, only slightly higher than those during 1966-70, aim at a fleet on the order of 16 million DWT and include modern containerships, 150,000-DWT tankers, and 120,000-DWT combined bulk ore and oil carriers. Other maritime fleets are likely to grow as fast as the Soviet fleet, but the Soviet fleet probably will displace the US fleet from sixth place by 1975. By that time it will still lag behind other leading maritime powers in average size of vessels and in numbers of large tankers, bulk carriers, and containerships.
- 29. The Soviet fleet will continue to be engaged overwhelmingly in the carriage of Soviet cargoes, but Soviet maritime officials will seek to improve the utilization of the fleet by finding foreign cargoes, particularly for the return voyages of ships carrying Soviet exports. They will also expand their liner services as a means of earning hard currency and enhancing their maritime image throughout the world. To facilitate their seaborne commerce, they will seek to add to the seven bilateral shipping agreements they now have with non-Communist countries. They are expected to continue their policy, followed in all except their earliest shipping agreements (with India and Egypt), of nondiscrimination in the allocation of cargoes. The Soviets also can be expected to set up additional shipping agencies abroad, both unilaterally and jointly with foreign nationals.
- 30. US seaborne trade, the world's largest, figures prominently in Soviet plans for its merchant fleet. Calls by Soviet ships at US West Coast ports almost certainly will increase sharply, and regular calls at US East Coast and Gulf ports will materialize quickly if the threat of a longshoremen's boycott is resolved. Not only will the Soviets attempt to carry a substantial part of their purchases of US grain in their own ships, but they would also like to pick up tramp cargoes in US ports for Soviet ships returning to Europe from Cuba. Shipping relations with the United

States are sufficiently important that the USSR has expressed a desire for a bilateral shipping agreement and has submitted to the US Government a proposed draft similar in many ways to agreements signed with other Western maritime powers.

APPENDIX

International Cargo Lines Served by the Soviet Merchant Fleet 30 September 1971

Lines Operated Unilaterally by Soviet Steamship Companies

USSR (Baltic Sea) - Sweden

USSR (Baltic Sea) - Norway and Denmark

USSR (Baltic Sea) - Finland - West Africa

USSR (Baltic Sea) - Cuba

USSR (Baltic Sea) - Europe - Malaysia a/

USSR (Baltic Sea) - Europe - Australia b/

USSR (Baltic Sea) - Europe - New Zealand $\underline{b}/$

USSR (Baltic Sea) - Western Europe - Eastern Canada a/

USSR (Baltic Sea) - Western Europe - West Coast of South America c/

USSR (Baltic Sea) - Netherlands, Belgium, and West Germany

USSR (Black Sea) - Mediterranean - Eastern Canada b/

USSR (Black Sea) - Cuba

USSR (Black Sea) - Southeast Asia (including North Vietnam)

USSR (Black Sea) - Persian Gulf (Iraq)

USSR (Black Sea) - Near East (Mediterranean)

USSR (Black Sea) - Southern France c/

Lines Operated Unilaterally by Soviet Steamship Companies

USSR (Black Sea) - Italy

USSR (Black Sea) - Greece and Turkey

USSR (Black Sea) - East Africa - Red Sea

USSR (Black Sea) - Western Europe - Malaysia c/

Iran (Caspian) - Baltic - North Sea (via Volga-Baltic Waterway)

USSR (Lower Danube) - Near East

USSR (Lower Danube) - North Africa

USSR (Far East) - Japan - Western Canada and the United States a/

USSR (Far East) - Japan - Southeast Asia -India <u>a</u>/

Lines Operated Jointly by Soviet and Foreign Steamship Companies	Nationality of Foreign Participant
USSR (Baltic Sea) - East Germany	East German
USSR (Baltic Sea) - Eastern Europe - Western Europe - South America <u>a</u> /	Polish
USSR (Baltic Sea) - West Germany	West German
USSR (Baltic Sea) - Netherlands	Dutch
USSR (Baltic Sea) - Belgium	Belgian
USSR (Baltic Sea) - France	French
USSR (Baltic Sea) - United Kingdom (East and West Coasts)	British

Lines Operated Jointly by Soviet and Foreign Steamship Companies	Nationality of Foreign Participant
USSR (Black Sea) - Bulgaria	Bulgarian
USSR (Black Sea) - Egypt	Egyptian
USSR (Black Sea) - India	Indian
USSR (Far East) - Japan	Japanese

a. An independent line operating in competition with conference lines on the same trade routes.

b. Conference line.

c. Lines introduced during the first nine months of 1971.